Application No. 10/500,838   2   Docket No.: 56792(71699)

AMENDMENTS TO THE CLAIMS

Claims 1-2.   (cancelled)

Claim 3.   (Previously Presented)   A method for detection and diagnosis of ovarian cancer comprising:

measuring at least one protein biomarker in a subject sample, wherein the protein markers are selected from:

Marker I: having a molecular weight of about 8.6 kD

Marker II: having a molecular weight of about 9.2 kD

Marker III: having a molecular weight of about 19.8 kD

Marker IV: having a molecular weight of about 39.8 kD

Marker V: having a molecular weight of about 54 kD

Marker VII: having a molecular weight of about 79 kD

and;

correlating the measurement of one or more protein biomarkers with a diagnosis of ovarian cancer, wherein an increase in the levels of one or more of Markers II and III, or a decrease in the levels of one or more of Markers I, IV, V or VII is indicative that the subject has ovarian cancer.

Claim 4.   (original)   The method of claim 3 wherein one or more protein biomarkers are used to diagnose ovarian cancer.

Claim 5.   (Previously Presented)   The method of claim 3 wherein a plurality of the biomarkers are detected.

Claims 6-8.   (cancelled)

Claim 9.   (Currently Amended)   The method of claim 3 wherein a single biomarker is used in combination with one or more additional known cancer biomarkers for diagnosing cancer.

BOS2 701753.1

Claim 10.   (Currently Amended)   The method of claim 3 wherein a plurality of the markers are used in combination with one or more additional known cancer markers for diagnosing cancer.

Claim 11.   (Currently Amended)   The method of claim 9 or 10 wherein the additional known cancer markers are ovarian cancer markers for diagnosing ovarian cancer.

Claim 12.   (Currently Amended)   The method of 11 wherein the additional known ovarian cancer marker is CA 125.

Claims 13-33.   (cancelled)

Claim 34.   (Previously Presented)   The method of claim 3 wherein one or more of the markers are detected using laser desorption/ionization mass spectrometry, comprising:

    providing a probe adapted for use with a mass spectrometer comprising an adsorbent attached thereto;

    contacting the subject sample with the adsorbent, and;

    desorbing and ionizing the marker or markers from the probe and detecting the deionized/ionized markers with the mass spectrometer.

Claims 35-38.   (cancelled)

Claim 39.   (Previously Presented)   The method of claim 3 wherein at least one or more protein biomarkers are detected using immunoassays.

Claim 40.   (original)   A process for purification of a biomarker, comprising fractioning a sample comprising one or more protein biomarkers by size-exclusion chromatography and collecting a fraction that includes the one or more biomarker; and/or fractionating a sample comprising the one or more biomarkers by anion

BOS2 701753.1

exchange chromatography and collecting a fraction that includes the one or more biomarkers.

Claims 41-61.   (cancelled)

Claim 62.   (Previously Presented)   The method of claim 3 wherein the stage of ovarian cancer is assessed.

Claims 63-84.   (cancelled)

BOS2 701753.1